



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,869	12/14/2005	David Nurok	29920-79201	3698
7590 Barnes & Thornburg 11 South Meridian Street Indianapolis, IN 46204		EXAMINER ZALASKY, KATHERINE M		
		ART UNIT 4153		
		MAIL DATE 11/13/2008		
		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/560,869

**Applicant(s)**

NUROK ET AL.

**Examiner**

KATHERINE ZALASKY

**Art Unit**

4153

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 10-33 and 35-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 20061006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group I, **claims 1-9 and 34**, in the reply filed on 20 October 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. **Claims 10-33 and 35-47** are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected Inventions II-V, there being no allowable generic or linking claim.

### *Specification*

3. The use of the trademark "Delrin" (pg 7, ln 3) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the "metal die block" of **claim 3** is not disclosed in the specification.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claim 3**, the recitation of the claim limitation "wherein the urging step comprises urging a metal die block" renders the claim indefinite because it is unclear whether this claim is adding the limitation of "metal" to the die block of **claim 1** or whether the claim is requiring a second, metal die block in the method of **claim 1**.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-9 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Nurok et al. (US 6,303,029).**

Regarding **claim 1**, Nurok et al. discloses a method of performing electrochromatography (abstract), the method comprising the steps of:

- urging a die block toward a stationary phase supported on a sample plate (C13/L12-39, die block 94, stationary phase 16, sample plate 12)

- so as to exert a pressure which is greater than atmospheric pressure against the stationary phase (C13/L12-39)
- creating an electrical potential across the stationary phase with a first electrode and a second electrode so as to cause a liquid mobile phase to be advanced across the stationary phase (C11/L24-28)

Regarding **claims 2-9 and 34**, Nurok et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the method:

- further comprising the step of placing the stationary phase in contact with the liquid mobile phase prior to the creating step (C12/L62-C13/L3)
- wherein the urging step comprises urging a metal die block toward the stationary phase supported on the sample plate (C13/L12-39, C11/L64 - C12/L15, membrane may comprise an aluminum nitride material)
- further comprising the step of positioning the sample plate in a plate holder prior to the urging step (Figure 5, plate held between die blocks 92, 94, and held in place by fasteners 108 and nuts 110)
- wherein the urging step comprises urging the die block with a fluid ram (C13/L12-39, membrane of die block acts as the ram, pushing against the sample plate)
- wherein the urging step comprises urging the die block with a hydraulic ram (C13/L12-39, membrane of die block acts as the ram, pushing against the sample plate)

- further comprising the step of positioning a cover slip over the sample plate prior to the urging step (C11/64-C12/L15, Teflon sheet)
- wherein the urging step comprises urging the die block into contact with the sample plate (C13/L12-39)
- wherein the stationary phase is supported on a first side of the sample plate, and the urging step comprises urging the die block into the first side of the sample plate (Fig 4-7, C13/L12-39)
- further comprising the step of advancing a fluid through a number of fluid channels defined in the die block (C13/L12-39, baffles 124)

9. **Claims 1-2, 5-6, 8 and 9** are rejected under 35 U.S.C. 102(b) as being anticipated by Mincsovics et al. (WO 01/50123).

Regarding **claim 1**, Mincsovics et al. discloses a method of performing electrochromatography (abstract, [0071]-[0072], the method comprising the steps of:

- urging a die block toward a stationary phase supported on a sample plate (Figure 2, [0047], die block 8, stationary phase 2, sample plate 3)
- so as to exert a pressure which is greater than atmospheric pressure against the stationary phase ([0047], Figure 2)
- creating an electrical potential across the stationary phase with a first electrode and a second electrode so as to cause a liquid mobile phase to be advanced across the stationary phase ([0071]-[0072])

Regarding **claims 2, 5-6, 8 and 9**, Mincsovics et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the method:

- further comprising the step of placing the stationary phase in contact with the liquid mobile phase prior to the creating step ([0038])
- wherein the urging step comprises urging the die block with a fluid ram ([0044]-[0047])
- wherein the urging step comprises urging the die block with a hydraulic ram ([0044]-[0047])
- wherein the urging step comprises urging the die block into contact with the sample plate ([0044]-[0047])
- wherein the stationary phase is supported on a first side of the sample plate, and the urging step comprises urging the die block into the first side of the sample plate([0044]-[0047])

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-9 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Nurok et al. (US 7,279,105).

The applied reference has a common Inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding **claim 1**, Nurok et al. discloses a method of performing electrochromatography (abstract), the method comprising the steps of:

- urging a die block toward a stationary phase supported on a sample plate (C13/L27-54, die block 94, stationary phase 16, sample plate 12)
- so as to exert a pressure which is greater than atmospheric pressure against the stationary phase (C13/L27-54)
- creating an electrical potential across the stationary phase with a first electrode and a second electrode so as to cause a liquid mobile phase to be advanced across the stationary phase (C11/L39-43)

Regarding **claims 2-9 and 34**, Nurok et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the method:

- further comprising the step of placing the stationary phase in contact with the liquid mobile phase prior to the creating step (C13/L10-18)
- wherein the urging step comprises urging a metal die block toward the stationary phase supported on the sample plate (C13/L27-54, C12/L5-30, membrane may comprise an aluminum nitride material)
- further comprising the step of positioning the sample plate in a plate holder prior to the urging step (Figure 5, plate held between die blocks 92, 94, and held in place by fasteners 108 and nuts 110)



- wherein the urging step comprises urging the die block with a fluid ram (C13/L27-54, membrane of die block acts as the ram, pushing against the sample plate)
- wherein the urging step comprises urging the die block with a hydraulic ram (C13/L27-54, membrane of die block acts as the ram, pushing against the sample plate)
- further comprising the step of positioning a cover slip over the sample plate prior to the urging step (C12/L5-30, Teflon sheet)
- wherein the urging step comprises urging the die block into contact with the sample plate (C13/L27-54)
- wherein the stationary phase is supported on a first side of the sample plate, and the urging step comprises urging the die block into the first side of the sample plate (Fig 4-7, C13/L27-54)
- further comprising the step of advancing a fluid through a number of fluid channels defined in the die block (C13/L27-54, baffles 124)

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. **Claims 1-2 and 5-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8 and 10-12 of U.S. Patent No. 7,279,105 in view of Hatch et al. (US 6,001,260).**

**Claims 1, 8, and 10-12** of US Patent No. 7,279,105 recite all of the limitations as recited in **claims 1-2 and 5-6** of the instant application, but they do not explicitly recited the use of die blocks to exert pressure on the stationary phase.

Hatch et al. discloses the use of a hydraulic ram (22) with die blocks (support members, 18, 14) to compress the stationary phase of a column for liquid chromatography. Additionally, Hatch et al. teaches that this hydraulic ram may be easily adapted to fit a wide range of stationary phase diameters (C10/L47-61).

It would have been obvious to one having ordinary skill in the art at the time of the invention to use die blocks and a hydraulic ram to exert pressure on the stationary phase recited in **claims 1, 8, and 10-12** of US Patent No. 7,279,105., as taught by Hatch et al., since doing so provides an easily adaptable compression element.

Therefore, **claims 1-2 and 5-6** of the instant application are directed to an invention not patentably distinct from **claims 1, 8, and 10-12** of US Patent No. 7,279,105, as set forth above.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHERINE ZALASKY whose telephone number is (571)270-7064. The examiner can normally be reached on Monday-Thursday, 7:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KZ/  
4 November 2008

/Basia Ridley/  
Supervisory Patent Examiner, Art Unit 4153